

be detachably mountable to the image forming apparatus. Therefore, should the rejection be withdrawn?

Status of the claims

Claims 37-39 are pending. Claim 38 has been amended. Claim 37 is independent.

Requested action

Applicants respectfully request the Office to reconsider and withdraw the outstanding rejections in view of the foregoing amendment and the following remarks.

Applicants also respectfully request that this Amendment be entered since it merely amends a dependent claim to overcome a formal rejection, thereby requiring minimum examining time and raising no additional issues. Moreover, since this Amendment overcomes the rejection, it places the application in condition for allowance, or at the very least, places the application in better form for appeal. Accordingly, entry of this Amendment is believed to be appropriate and such entry is respectfully requested.

Formal rejection

Claim 38 is rejected under 35 U.S.C. § 112, second paragraph. In response, while not conceding the propriety of the rejection, Claim 38 has been amended to address the points raised by the Examiner. Applicants submit that as amended, Claim 38 now even more clearly satisfies 35 U.S.C. § 112, second paragraph.

Allowable subject matter

Applicants gratefully acknowledge that indication that Claim 38 would be allowed if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph and to include all of the limitations of the base claim and any intervening claims from which it depends. Applicants also gratefully acknowledge the indication that Claim 39 would be allowed if rewritten in independent form including all of the limitations of the base claim and any intervening claims from which it depends. Applicants have not redrafted Claims 38 and 39 in independent form because the independent claim from which they depend is believed to be allowable for the reasons discussed below.

Substantive rejection

Claim 36 is rejected under 35 U.S.C. § 102(b) as being anticipated by the patent to Ichikawa, et al. As noted above, since Claim 36 has been canceled and since Claim 37 is the sole independent claim, Applicants assume that it is Claim 37 that is rejected under 35 U.S.C. § 102(b) as being anticipated by the patent to Ichikawa, et al.

Response to substantive rejection

This rejection is respectfully traversed for the following reasons.

Independent Claim 37 relates to a toner supply container detachably mountable to an image forming apparatus, comprising a main body for accommodating toner, an opening, provided in the main body, for permitting discharge of the toner, a capping member for capping the opening, and an engaging member slidably movable relative to the

capping member to open and close the opening by relative movement of the capping member relative to the main body. When the opening is opened to permit toner discharge therethrough, an engagement between the capping member and the engaging member is maintained.

To reject this claim, the Office Action cites the Ichikawa, et al. patent to show a toner supply container 20, an opening 23, a capping member 25, and an engaging member 30. But element 30 is not detachably mountable to an image forming apparatus as required by Claim 37. This can be seen as follows. The Ichikawa, et al. patent discloses a copier comprising a toner supply unit 17 including a bottle holder 21 that holds a toner bottle 20. (Column 6, lines 30-32.) The bottle holder 21 is mounted on a shaft 22, shown in Figure 1A, so as to rotate between a position A, in which it can receive the toner bottle 20 (when the front cover of the unit 17 is opened), and position B, in which the bottom opening of the bottle holder 21 is positioned above a toner receiving portion 16a of a hopper 16. (Column 6, lines 38-52.) These two positions are illustrated in Figure 1B. The copier also comprises a mechanism 32 for removing a lid 25 from a mouth portion 23 of the toner bottle 20. This mechanism 32 comprises a collet chuck 30 that is supported by a hole 31a formed in a wall 31 that forms part of the bottle holder 21, as seen in Figures 4A-4C. (Column 7, lines 9-16.) Thus, the collet chuck 30, which the Office Action has identified as the engaging member recited in Claim 37, is attached to bottle holder 21 and the bottle holder 21 is attached to the toner supply unit 17 of the copier. Since there is no disclosure that either the collet chuck 30 or the bottle holder 21 is detachable from the copier, the Office has not cited a reference to disclose a toner supply container detachably mountable

to an image forming apparatus, comprising an engaging member, as recited by independent Claim 37.

Since the Office has failed to identify the portions of the Ichikawa, et al. patent disclosing all the features of Claim 37, the Office has not established that Claim 37 is anticipated by the Ichikawa, et al. patent under 35 U.S.C. § 102(b). Therefore, Claim 37 is allowable over the Ichikawa, et al. patent under 35 U.S.C. § 102(b). And because MPEP § 2142 requires the cited art to disclose or suggest all the claimed features to support a prima facie case of obviousness, Claim 37 is also allowable over the Ichikawa, et al. patent under 35 U.S.C. § 103.

Claims 38 and 39 depend from Claim 37 and therefore, they are allowable for the same reasons as Claim 37. In addition, these claims contain allowable subject matter, as noted in the Office Action, and they are, therefore, also allowable for this additional reason.

Information Disclosure Statement

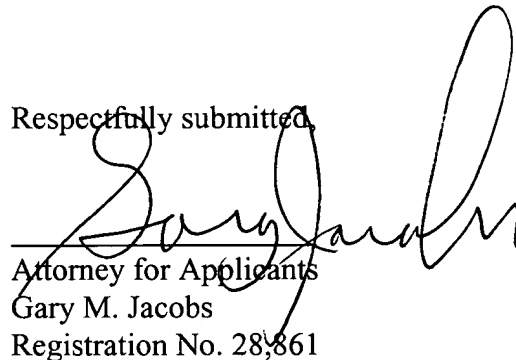
Applicants are filing herewith an Information Disclosure Statement with art recently cited during the prosecution of foreign counterpart applications. But because more than three months have passed since the citation of such art, Applicants cannot file the requisite certification and the Examiner need not consider such art at this stage of prosecution. Nevertheless, Applicants respectfully request that the Examiner consider exercising his discretion to consider this art, copies of which are attached.

Conclusion

In view of the above amendments and remarks, the claims are now in allowable form and entry of this Amendment is considered proper . Therefore, early passage to issue is respectfully solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



Attorney for Applicants
Gary M. Jacobs
Registration No. 28,861

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile No.: (212) 218-2200

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MARKED-UP AMENDED SPECIFICATION

Please amend the paragraph beginning at page 1, line 11 and ending at line 18, as follows.

--The electrophotographic image forming apparatus forms an image on a recording material using an [electrophotographic image formation type] electrophotographic-image-formation-type process. Examples of an electrophotographic image forming apparatus include an electrophotographic copying machine, an electrophotographic printer (laser beam printer, LED printer or the like), a facsimile machine and a word processor.--.

Please amend the paragraph beginning at page 1, line 19 and ending at line 25, as follows.

--Heretofore, an electrophotographic image forming apparatus, such as an electrophotographic copying machine or a printer, uses fine toner powder as a developer. When the developer in the main assembly of the apparatus is used up, the toner is supplied into the main assembly of the apparatus using a toner supply container.--.

Please amend the paragraph beginning at page 2, line 8 and ending at line 17, as follows.

--[As an] An example of a toner supply container provided with such a toner feeding means is disclosed in Japanese Patent Application Publication No. HEI-7-113796.

The toner supply container is generally cylindrical, and one end portion thereof is provided with a relatively small opening for discharging the toner. In the container, there is provided a helical toner feeding member which receives a driving force from the outside, penetrating through a wall of the end of the container.--.

Please amend the paragraph beginning at page 3, line 4 and ending at line 11, as follows.

--On the other hand, another toner supply container having toner feeding means is disclosed in Japanese Laid-open Patent Application No. HEI-7-44000. The toner supply container is in the form of a cylindrical bottle, and the inside surface thereof is provided with a helical rib, and a small toner discharging outlet is provided adjacent the center at one end.--

Please amend the paragraph beginning at page 3, line 24 and ending at page 4, line 2, as follows.

--Accordingly, it is a principal object of the present invention to provide a toner supply container which is placed in a main assembly of an electrophotographic image forming apparatus and [wherein] which supplies the toner [can be supplied] into the main assembly with high reliability.--.

Please amend the paragraph beginning at page 4, line 3 and ending at line 5, as follows.

--It is another object of the present invention to provide a toner supply container of a low [manufacturing cost] manufacturing-cost type.--.

Please amend the paragraph beginning at page 4, line 6 and ending at line 19, as follows.

--According to an aspect of the present invention, there is provided a toner supply container detachably mountable to a main assembly of an electrophotographic image forming apparatus, comprising: (a) a toner accommodating portion for accommodating toner; (b) a toner supply opening or port for discharging toner accommodated in the toner accommodating portion; and (c) a toner feeding member for feeding the toner accommodated in the toner accommodating portion toward the toner supply opening by rotation [thereof, wherein a] thereof. The center of rotation of the toner feeding member is in an opening region of the toner supply port as seen in the longitudinal direction of the toner feeding member.--.

Please amend the paragraph beginning at page 5, line 8 and ending at line 13, as follows.

--Figure 3 is an illustration of the toner supply container and the electrophotographic copying machine, wherein the cover of the electrophotographic copying machine, for the exchange of the toner supply container, is opened to load the toner supply container.--.

Please amend the paragraph beginning at page 5, line 26 and ending at page 6, line 3, as follows.

--Figure 7 shows the electrophotographic copying machine, wherein (A) is a side view thereof, (B) is a front view thereof, (C) is a top plan view thereof, wherein a cover for toner supply container exchange is opened.--.

Please amend the paragraph beginning at page 9, line 18 and ending at line 19, as follows.

--Figure 33 shows a [detail] detailed configuration of the first coupling member.--.

Please amend the paragraph beginning at page 9, line 24 and ending at line 25, as follows.

--Figure 36 shows a [detail] detailed configuration of the second coupling member.--.

Please amend the paragraph beginning at page 10, line 17 and ending at line 22, as follows.

--Referring to Figure 1, [the] a description will first be [made] provided with respect to a structure of an electrophotographic copying machine which is an example of an electrophotographic image forming apparatus to which a toner supply container according to the present invention is mountable.--

Please amend the paragraph beginning at page 10, line 23 and ending at page 11, line 9, as follows.

--In the figure [Figure], designated by 100 is a main assembly of the electrophotographic copying machine. Reference numeral 101 designates an original, which is placed on an original supporting platen glass 102. A light image corresponding to image information is formed on an electrophotographic photosensitive drum 104 through a plurality of [mirror] mirrors M and a lens Ln of an optical portion 103. Designated by 105 - 108 are cassettes. Among the cassettes 105 - 108, the one containing the proper size sheets corresponding to the paper size of the original 101 or the information inputted by the user at the operating portion 100a is selected. The recording material is not limited to paper, but may be an OHP sheet or the like.--.

Please amend the paragraph beginning at page 12, line 21 and ending at page 13, line 15, as follows.

--In the main assembly 100 of the apparatus, a developing station 201, a cleaner station 202, a primary charger 203 and the like are disposed around the drum 104. The developing station 201 functions to develop with toner an electrostatic latent image formed on the drum 104 by the optical portion 103 on the basis of the information of the original 101. A toner supply container 1 for supplying the toner to the developing station 201 is mounted to the main assembly 100 in the manner that the operator can mount and demount it. The developing station 201 has a toner hopper 201a and a developing device 201b. The toner hopper 201a includes a stirring member 201c for stirring the toner supplied from the toner supply container. The toner stirred by the stirring member 201c is fed to the developing device 201b by a magnet roller 201d. The developing device 201b includes a developing roller 201f and a feeding member 201e. The toner fed from the toner hopper 201a by the magnet roller 201d, is further fed to the developing roller 201f by the feeding member 201e, and then is supplied to the photosensitive drum 104 by the developing roller 201f.--.

Please amend the paragraph beginning at page 13, line 20, and ending at page 14, line 7, as follows.

--When the operator opens, as shown in Figure 3, the cover 15, for exchanging the toner supply container, the cover being a part of the outer casing, the container receptor table 50 is drawn out to a predetermined position by a driving system (unshown). A toner supply container 1 is placed on the table 50. When the user takes out the container 1 from the main assembly 100 of the apparatus, the toner supply container 1 is removed from the table 50 which has been drawn out. The cover 15 is provided exclusively for mounting and demounting (exchanging) the toner supply container 1, and is opened or closed only when the container 1 is mounted or demounted. For the maintenance of the main assembly 100, a cover 100c at the front side is opened.--.

Please amend the paragraph beginning at page 14, line 11 and ending at line 20, as follows.

--Referring to Figures 4 and 5, the toner supply container according to the first embodiment of the present invention will be described. In Figure 4, (A) is a [partially] partial sectional front view of the toner supply container of this embodiment. (B) is a side view of the toner supply container. (C) is a sectional side view of the toner supply container. Figure 5 is a sectional front view wherein the toner supply container is loaded in the main assembly of the apparatus, and it has been unsealed.--.

Please amend the paragraph beginning at page 14, line 21 and ending at page 15, line 11, as follows.

--In Figures 4 and 5 [Figure 4 and 5], designated by 1A is a main part of the toner supply container (main body of the container). The powder toner is to develop the electrostatic latent image formed on the drum 104, and may be one component toner, two component toner or another. Designated by 2 is a feeding member for supplying the powder toner accommodated in the main body 1A of the container to the toner hopper 201a which is a receiving portion mounted to the main assembly 100. Designated by 3 is a sealing member, 4 is a coupling member, and 9 is a toner receiving port provided in the toner hopper 201a in the main assembly 100. The toner discharged from the toner supply container 1 is fed into the toner hopper 201a from the receiving port 9. The structure may be such that toner discharged from the toner supply container 1 is fed directly into the developing device 201b not through the toner hopper 201a.--.

Please amend the paragraph beginning at page 15, line 12 and ending at page 16, line 2, as follows.

--The main body 1A of the toner supply container includes a curved portion 1F having a width which decreases toward the bottom, and a flat surface portion [1G] having a substantially constant width, and an arcuate configuration portion [1H] extending down from the flat surface portion. Here, the lower portion [means] refers to the portion [which takes] that assumes a lower [portion] position when the toner supply container 1 is mounted to the main assembly 100 of the apparatus, and the bottom surface, the upper surface, the lower surface and the side surface are the surfaces which are the bottom surface, the upper

surface, the lower surface and the side surface when the toner supply container 1 is mounted to the main assembly 100. The toner supply container 1 is shown in the same position as when it is mounted to the main assembly of the apparatus in Figures 4, 5, 14, 15, 16, 21, 22, 23, 24, 25, 26 and 39.--.

Please amend the paragraph beginning at page 16, line 3 and ending at page 17, line 4, as follows.

--On a lower portion of a side surface 1A1 of the main assembly 1A of the container, a cylindrical toner supply port portion 1a for supplying the toner accommodated in the toner accommodating portion 1n into the main assembly of the apparatus, is formed as a projection. At one end portion of the toner supply port portion 1a, a toner supply port 1g is provided. [provide.] A receiving portion 1b is formed to rotatably support the feeding member 2 at a position corresponding to the toner supply port portion 1a in the other side surface 1B. At an outside of the bottom surface 1D, there is provided an engaging portion 1c for engagement with an opening and closing means for the toner supply port, which is provided in the main assembly 100 and which will be described hereinafter, to move the toner supply container 1 in the mounting and demounting direction. In this embodiment, the engaging portion 1C is in the form of a dowel projected outwardly from the bottom surface 1D. The upper surface 1E is provided with a recess 1e for providing a grip for facilitating the operator when the toner supply container 1 is mounted to the main assembly 100 of the apparatus and when it is demounted from the main assembly 100. On the front

side and the lower inclined surface 1 of the back side, ribs if are extended parallel to each other to facilitate the handling of the main body 1A of the container when the user mounts the toner supply container 1 into the main assembly 100.--.

Please amend the paragraph beginning at page 17, line 5 and ending at line 12, as follows.

--The main body 1A of the container may preferably be produced through injection molding, blow molding, injection blow molding or the like, of a plastic resin material, but another manufacturing method and/or material is also usable. The main body 1A may be divided into two or more parts, and the manufactured parts may be welded or bonded to unify them.--.

Please amend the paragraph beginning at page 17, line 13 and ending at line 16, as follows.

--In this embodiment, an upper frame and a lower frame, which are manufactured respectively through injection molding of high impact polystyrene, are joined together by vibration welding.--.

Please amend the paragraph beginning at page 17, line 17 and ending at page 18, line 1, as follows.

--On the other hand, the feeding member 2 functions to feed the toner accommodated in the main body 1A to the toner supply port 1g. The feeding member 2 includes, as shown in Figure 5, a shaft portion 2A, and a rigid helical feeding blade 2B on the shaft portion 2A, which functions as a feeding portion for feeding the powder toner in a predetermined direction by rotation of the shaft portion 2A. The feeding member 2 is mounted to the main body 1A of the container with the axis of the shaft portion 2A substantially coaxial with the center of the toner supply port 1g.--.

Please amend the paragraph beginning at page 18, line 2 and ending at line 8, as follows.

--The feeding member 2 is not limited to [a] the so-called screw type of this embodiment, but may be [a] flexible blades mounted on the shaft portion 2A, for example. The shaft portion and the blades may be integrally molded. In this embodiment, the shaft portion 2A and the blades 2B are of plastic resin material and are integrally molded.--.

Please amend the paragraph beginning at page 18, line 9 and ending at line 18, as follows.

--In this embodiment, the feeding member 2 includes an extending portion [2C] 2c which extends into the cylinder portion of the toner supply port portion 1a. In this embodiment, the extending portion [2C] 2c is projected outwardly from the toner supply

port portion 1a. The free end portion of the extending portion [2C] 2c projected outwardly receives a rotation force from the main assembly 100 of the apparatus. To accomplish this, the free end portion is provided with a sealing member 3 which is movable in the axial direction.--.

Please amend the paragraph beginning at page 18, line 19 and ending at page 19, line 4, as follows.

--As will be described in detail hereinafter, the sealing member 3 has four functions in this embodiment. More particularly, the four functions are (1) to seal the toner supply port portion 1a; (2) to receive the rotation force transmitted from the main assembly 100; (3) to transmit the rotation force to the feeding member 3; and (4) to [engaged] engage with an engageable member 6 provided in the main assembly of the apparatus to open and close the toner supply port portion 1a. The driving force received by the sealing member 3 from the main assembly 100 is transmitted to the shaft portion 2A through the extending portion [2C] 2c to rotate the feeding member 2. ---.

Please amend the paragraph beginning at page 20, line 4 and ending at line 9, as follows.

--The feeding member 2 may preferably be manufactured through injection molding or the like from a plastic resin material, as has been described, but another method

or material [is] may be usable. It may be divided into a plurality of parts which are separately manufactured, and then are joined.--.

Please amend the paragraph beginning at page 20, line 26 and ending at page 21, line 17, as follows.

--Designated by 3c is a coupling engaging portion which functions as a driving force receiving portion for receiving a driving force for rotating the feeding member 2 from the main assembly 100 of the apparatus when the toner supply container 1 is mounted to the main assembly 100. The coupling engaging portion 3c is provided with a projected portion 3c1 extended coaxially with [the] a shaft portion 2A of the feeding member 2 in [the] a direction away from the main body 1A from the sealing portion 3b (when the sealing member 3 is mounted to the main body 1A of the container). The coupling engaging portion 3c is provided with elongated spline projections (rib) 3d on the peripheral surface of the projected portion 3c1, which projections function as a driving force receiving portion engageable with the coupling member 4. In this embodiment, four of such spline projections are provided circumferentially equidistantly.--.

Please amend the paragraph beginning at page 23, line 15 and ending at line 23, as follows.

--The sealing, member 3 having such a structure may preferably be manufactured by injection molding of a resin material or the like, but another method and/or material is usable. The sealing member 3 is required to have a proper elasticity to press-fit in the toner supply port 1a and seal the port. The material is preferably a low density polyethylene, and [another] other usable examples include polypropylene, high density polyethylene or the like.--.

Please amend the paragraph beginning at page 23, line 26 and ending at page 24, line 9, as follows.

--In the assembling method of the toner supply container 1, the feeding member 2 is inserted into the lower portion of the main body 1A of the container through the toner supply port 1g (Figure 5). Then, the predetermined amount of the toner (unshown) is filled into the main body 1A, and finally, the toner supply port 1g is sealed by a sealing member 3, by which filling of the toner supply container 1 is accomplished. Thus, the assembling of the toner supply container 1 of this embodiment is very simple and easy, and the number of the manufacturing steps is very small.--.

Please amend the paragraph beginning at page 24, line 22 and ending at page 25, line 7, as follows.

--In the toner supply port portion 1a, the feeding member 2 is extended, and therefore, it is preferable to have a sufficient size [enough] to permit smooth discharging of the toner. [The] A description will be [made] provided as to the ratio of the cross-sectional area of the toner supply port portion 1a and the cross-sectional area of the passing portion (shaft portion 2A) of the feeding member 2. The cross-sectional area of the toner supply port portion 1a is preferably not less than twice the cross-sectional area of the shaft portion 2A of the feeding member 2, further preferably, not less than three times, and even further preferably not less than five times.--.

Please amend the paragraph beginning at page 25, line 23 and ending at line 24, as follows.

--[The] A description will be [made] provided as to an exchanging method of the toner supply container.--.

Please amend the paragraph beginning at page 26, line 8 and ending at line 18, as follows.

--As shown in (A) and (B) of Figures 2 and 7, the cover 15, which is at this time is closed, is opened by rotating it about the hinge 18 to a position as shown in Figure 3(C). The main body 1A is moved by toner supply portion opening means, which will be described hereinafter, in interrelation with the opening of the cover 15, and the sealing

member 3 (Figure 9), which is at the open position away from the main body 1A to open the toner supply port 1g, is press-fitted into the toner supply port portion 1a, by which the toner supply port 1g is closed (Figure 8).--.

Please amend the paragraph beginning at page 27, line 5 and ending at line 20, as follows.

--Referring to Figures 8 and 9, [the] a description will be [made] provided as to opening and closing [operation] operations of the toner supply port 1g, which [is] are interrelated with the opening and closing operation of the cover 15. The structures in the following description are provided in the main assembly 100 of the apparatus. In Figures 8 and 9, designated by 6 is a locking member functioning as locking means for locking the sealing member 3 by engagement with the locking projection 3e of the coupling engaging portion 3c. Designated by 57 is a supporting table having the locking member 6 mounted thereto, and the supporting table 57 is rotatable about a rotation shaft 57a, and is urged in the clockwise direction by the urging member 58. Designated by 59 is a stopper for positioning the supporting table 57.--.

Please amend the paragraph beginning at page 29, line 26 and ending at page 30, line 5, as follows.

--The cover 15 is provided with a projection 15b which enters the groove portion 61d when the cover 15 is closed. By the projection 15b entering the groove portion 61d, the swingable arm 61 is swung in the [anti-clock] counterclockwise direction against the elastic force of the urging member 62 in interrelation with the closing operation of the cover 15.--.

Please amend the paragraph beginning at page 31, line 22 and ending at page 32, line 5, as follows.

--When the cover 15 is closed to a predetermined position, the projection 15b of the cover 15 enters the groove portion 61d of the swingable arm 61 to swing the swingable arm 61 in the counterclockwise direction [counterclockwisely] against the elastic force of the projection 15b. By the swing of the swingable arm 61, the slide table 60 slides in the direction of the arrow A. By this, the toner supply container 1, which is locked by the container chucking member 51 at the engaging projection 1c, also slides in the same direction.--.

Please amend the paragraph beginning at page 32, line 6 and ending at line 26, as follows.

--When the supply container 1 moves in the direction of the arrow A, the sealing member 3 is locked by the locking member 6 so that it is unable to move in the direction of

the arrow A. Therefore, the main body 1A of the container is separated away from the sealing member 3, thus opening the toner supply port 1g as shown in Figure 9. The toner supply port portion 1a, as shown in Figure 5, is held by a holder 5 of the main assembly 100 with the outer periphery being sealed with an annular seal member 7. Therefore, when the supply container 1 is mounted to the main assembly 100, the position thereof is determined by the engaging projection 1C and the toner supply port portion 1a. In this embodiment, the sealing member 3 is supported at a position away from the toner supply port 1g. By doing so, it can be kept at a position away by a distance necessary to permit smooth discharge of the toner, depending on the coagulation property of the toner. Thus, [the] plugging adjacent the discharging outlet and various problems resulting therefrom can be avoided.--.

Please amend the paragraph beginning at page 33, line 9 and ending at line 18, as follows.

--At this time, the container chucking member 51 receives a force in the clockwise direction from the engaging projection 1c of the toner supply container 1. However, since the locking member 56 locks rotation of the container chucking member 51, the engaging projection 1c is prevented from disengaging from the container chucking member 51. Therefore, the toner supply container 1 slides until the toner supply port 1g abuts the flange portion 3f of the sealing member 3, by which the toner supply port 1g is closed.--.

Please amend the paragraph beginning at page 33, line 19 and ending at page 34, line 1, as follows.

--Then, the cover 15 is further opened, the slide shaft 54 is moved to a predetermined position determined by the shaft stopper 55 since it is urged in the direction of arrow A by the urging means as described hereinbefore. With this, the locking member 6 rotates [clockwisely] in the clockwise direction to be away from the sealing member 3. Therefore, the sealing member 3 is released by the locking member 6. The container chucking member 51 is released from locking of the locking member 56.--.

Please amend the paragraph beginning at page 36, line 4 and ending at line 18, as follows.

--In this embodiment, four of such spline projections 3d are formed on the outer curved surface of the sealing member 3, equidistantly. Additionally, twelve engaging grooves 4c are formed in the coupling member 4. The number of the engaging grooves 4c is larger than the number of the projections 3d, and guiding portions 4d are provided, so that when the toner supply container is mounted to the main assembly, they can be assuredly engaged even if a phase difference exists between the spline projections 3d and the engaging grooves 4c. The number of the projections 3d of the sealing member 3 is not limited to four, but may be properly selected by one skilled in the art. The same applies to the number of the engaging grooves 4c, and is not limited to 12.--.

Please amend the paragraph beginning at page 36, line 19 and ending at line 20, as follows.

--[The] A description will be [made] provided as to discharging of the toner.--.

Please amend the paragraph beginning at page 36, line 21 and ending at page 37, line 5, as follows.

--The coupling member 4 receives the rotation force through the drive transmitting means (unshown) such as a gear or the like from the driving source (unshown), such as a motor or the like, of the main assembly 100. The driving force is transmitted to the sealing member 3 through the engagement between the spline projection 3d and the engaging groove 4c, and is transmitted to the feeding member 2 through the engagement between the H-shaped free end 2a and the H-shaped engaging hole 3a. In this embodiment, the rotational speed of the feeding member 2 is 25 rotations per minute.--.

Please amend the paragraph beginning at page 37, line 17 and ending at line 27, as follows.

--A rotational sliding portion exists at a portion where the sealing member 3 and the main assembly 100 are contacted, but the portion is away from the toner supply port portion 1a, and therefore, it [is] does not [contacted] directly [with] contact the toner, so that

coagulation of the toner or the like does not result. The position of the rotational sliding portion can be away from the toner supply port portion 1a by a proper distance in accordance with the flowability of the toner, the feeding power of the feeding member 2, and the discharging speed of the toner.--.

Please amend the paragraph beginning at page 38, line 14 and ending at line 22, as follows.

--The rotational speed of the feeding member 2 is properly selected by one skilled in the art in accordance with the toner feeding amount, but if it is too high, the [loads] load of the driving source of the main assembly 100 or the drive transmission mechanism [is] are increased, and if it is too low the toner cannot be sufficiently fed. Preferably, it is 3 - 100 rotations per minute, and further preferably, 5 - 50 rotations per [minutes] minutes.--.

Please amend the paragraph beginning at page 38, line 23 and ending at page 39, line 7, as follows.

--The configuration of the main body 1A of the container may be any shape if the space can be effectively used, and the size and capacity of the toner container can be selected properly by one skilled in the art. Even if the toner amount is as large as [approx.] approximately 2 kg, for example, what is rotated is only the feeding member 2, and therefore, the required rotation torque is as small as 2 - 3 kgf-cm. The sealing member 3 is

press-fitted into the toner supply portion 1a, but a seal member may be used to seal the portion, or a threaded portion corresponding to the main body 1A and the sealing member 3 may be used to seal the portion.--.

Please amend the paragraph beginning at page 39, line 8 and ending at line 18, as follows.

--In the first embodiment, the feeding element of the feeding member 2 is of a helical shape which has a high feeding power, but the helical shape is not inevitable. For example, as shown in [Figure in] Figure 11, (A), a blade portion 2Ba in the form of a film as a feeding element may be mounted on the shaft portion 2A. In such a case, the toner is discharged using the flowability of the toner. As shown in Figure 11, (B), the blade portion 2Ba may be provided with a window 2B1 by which the driving torque of the feeding member 2 can be reduced.--.

Please amend the paragraph beginning at page 39, line 23 and ending at page 40, line 6, as follows.

--Figure 12 is a perspective view of the feeding member 2 for the toner supply container according to the second embodiment. In this figure [Figure], designated by 21 is a blade portion of the feeding member 2 mounted such that the phase thereof is continuously changed in the axial direction of the shaft portion 2A. The feeding member 2

provided with such a blade portion 21 is preferably formed integrally through injection molding or the like, but may be divided into two or more parts which are unified by welding or bonding or the like.--.

Please amend the paragraph beginning at page 40, line 7 and ending at line 16, as follows.

--As a material of the shaft portion 2A when the feeding member 2 is divided into two parts, there are plastic resin material, metal or the like having a rigidity. The blade portion 21 is preferably made of a sheet material having [a flexibility. More] flexibility and more particularly may be made of[,] a single layer material or multiple layer material of polyester, polypropylene, Nylon, polyethylene or fluorine resin material. The thickness of the blade portion 21 is preferably [approx.] approximately 50 μm - 1 mm.--.

Please amend the paragraph beginning at page 40, line 19 and ending at page 41, line 1, as follows.

--The configuration of the blade portion 21 is not necessarily a particular shape such as trapezoidal shape, but what is needed is that the length from the center of rotation of the shaft portion 2A to the free end of the blade portion 21 is substantially constant along the total length of the blade portion 21 (as with a rectangular configuration for example).

From the standpoint of the assembling property of the feeding member 2, the blade portion 21 is an integral member along its entire length.--.

Please amend the paragraph beginning at page 41, line 11 and ending at line 13, as follows.

--[The] A description will be [made] provided as to the mounting method of the blade portion 21 to the shaft portion 2A.--.

Please amend the paragraph beginning at page 41, line 14 and ending at line 20, as follows.

--When the feeding member 2 is [constitution] constituted by the shaft portion 2A and the blade portion 21, it is required that the blade portion 21 is mounted to the shaft portion 2 with a twist relative to the axial direction of the shaft portion 2A so that the phase is continuously changed relative to the axial direction of the shaft portion 2A.--.

Please amend the paragraph beginning at page 41, line 21 and ending at page 42, line 2, as follows.

--As for the mounting method, as shown in Figure 12, the drum portion of the shaft portion 2A is provided with crimp bosses 22 at several portions to permit mounting of the

blade 2B. On the other hand, the blade portion 21 is provided with a crimp hole portion 23 for receiving the crimp bosses 22 of the shaft portion 2. The crimp bosses 22 are engaged in the crimp hole portions 23, and they are coupled and unified by a heat crimp or an ultrasonic crimp.--.

Please amend the paragraph beginning at page 42, line 13 and ending at line 15, as follows.

--In any of the types, it is preferable that the phase difference of the blade portion 21 relative to the axial direction is [approx.] approximately 90 degrees.--.

Please amend the paragraph beginning at page 42, line 19 and ending at page 43, line 3, as follows.

--By rotation, through 0 - 360 degrees, of the shaft portion 2A of the feeding member 2 in the direction of arrow A in (1) of this figure [Figure], the entirety of the feeding member 2 sequentially rotates in the order of (1) -> (2) -> (3) -> (4) -> (1). During the rotation (1) -> (2), the blade portion 21 is flexed and curved while entering the space formed between the inner lower surface of the main body 1A of the container and the shaft portion 2A. The blade portion 21 rotates through (2) -> (3) -> (4) while rubbing the inner lower surface of the main body 1A of the container.--.

Please amend the paragraph beginning at page 43, line 13 and ending at line 19, as follows.

--Since the blade portion 21 [is contacted to] contacts the inner lower surface of the main body 1A of the container, the toner can be effectively fed even when the toner amount in the main body 1A of the container decreases, and as a result, the remainder toner amount can be reduced after the end of the toner discharge therefrom.--.

Please amend the paragraph beginning at page 43, line 20 and ending at page 44, line 1, as follows.

--Furthermore, the toner is fed toward the discharging outlet by the spring-back action of the blade portion 21 at the time of (4) to (1) in Figure 14. Thus, in addition to the toner feeding effect by the flexibility of the blade portion 21 at the time of contact thereof to the inner lower surface of the main body 1A of the container, the spring-back effect of the blade portion 21 [Further] further feeds the toner, and therefore, the toner can be further efficiently fed.--.

Please amend the paragraph beginning at page 44, line 2 and ending at line 13, as follows.

--As shown in Figure 14, (5), by providing a sufficient length from the shaft portion 2A to the free end of the blade portion 21, caked toner T1 can be uncaked by the elasticity of the blade portion 21. Thus, this embodiment is usable with a container of the type wherein the height of the main body 1A is so large that the toner supply port portion 1a takes a position below the main body 1A of the container, so that latitude is enhanced to reduce the limit to the configuration, by which the space in the main assembly of the image forming apparatus can be effectively utilized.--.

Please amend the paragraph beginning at page 44, line 14 and ending at page 45, line 4, as follows.

--Toner discharging experiments have been carried out using the toner supply container 1 of the above-described structure, and it was confirmed that a stable toner discharging property (toner discharging amount per unit time) was accomplished, and the remainder toner amount in the container after the end of the discharge was as small as [approx.] approximately 10 g. The initial torque required for the rotation of the feeding member 2 was [approx.] approximately 2 kgf-cm. In the experiments, the blade portion 21 of the feeding member 2 was made of a polyester sheet having a thickness of [approx.] approximately 188 μ m, and was mounted to the shaft portion 2A of ABS resin material using a double coated tape. The main body 1A of the container contained [approx.] approximately 1,500 g of the toner, and the feeding member 2 was rotated at the speed of

rotational frequency [approx.] of approximately 30 rotations per minute to [toner] discharge the toner.--.

Please amend the paragraph beginning at page 45, line 5 and ending at line 13, as follows.

--The rotational speed of the feeding member 2 was changed in the range of 20 - 50 rotations per minute, and the discharging property change was checked, and it was found that the toner discharging amount per unit time increased with an increase of the rotational speed. It therefore was found that the toner discharging amount per unit time can be controlled by controlling the rotational speed of the feeding member 2.--.

Please amend the paragraph beginning at page 45, line 23 and ending at page 46, line 4, as follows.

--As a result, the toner discharging property and the remainder toner amount were substantially the same as with the experiments without the tapping, so that it was confirmed that toner can be effectively discharged while uncaking the caked toner. The required initial torque for the rotation of the feeding member 2 is slightly higher (approximately [approx.] 5 kgf-cm), but it is not so high that the driving source is overloaded.--.

Please amend the paragraph beginning at page 46, line 5 and ending at line 12, as follows.

--The rotation torque is a maximum when the blade portion 21 enters the caked toner (between (1) and (2) in Figure 14). When the feeding member 2 has such a structure that the phase of the blade portion 21 in the axial direction is changed, the timing of the blade portion 21 entering into the toner is different in the axial direction, so that rotation torque can be reduced.--.

Please amend the paragraph beginning at page 47, line 5 and ending at line 15, as follows.

--As a result, the toner discharging property was better than in the first embodiment, and the remainder toner amount after the end of the toner discharge was [approx.] approximately 10g. As a result of the addition of the screw member 2e, the variation of the toner discharging amount was 5 - 10 g/min., which was better than 10 - 20 g/min[. In] in the first embodiment, and the improved stability of the toner discharging amount was confirmed. The required initial torque for the rotation of the feeding member 2 was [approx.] approximately 4 kgf-cm.--.

Please amend the paragraph beginning at page 47, line 25 and ending at page 48, line 16, as follows.

--The toner discharging amount per unit time was stable from the initial stage to the final stage of the toner discharging when the toner was caked before the toner discharge by tapping the container and when the toner was uncaked by shaking the supply container 1 by the user before it is mounted to the main assembly 100 of the apparatus. For example, when the feeding member 2 is rotated at 36 rpm, the toner discharging amount was [70 - 100 g/min. Irrespective] 70 - 100 g/min, irrespective of the state of the toner beforehand. When the toner is not caked and loose, [the] toner having high flowability tends to rush into the discharging outlet (toner supply port 1g) and discharges at an unnecessarily high speed (flushing), but such a phenomenon does not occur with the embodiment of Figure 16. This is because at least one full turn of the screw member 2e, which has a [having the] helical configuration and is disposed in the cylindrical toner supplying portion 1a so that rushed toner can be properly stopped thereby.--.

Please amend the paragraph beginning at page 48, line 17 and ending at line 25, as follows.

--Discharging experiments were carried out for the toner supply container 1 filled with the toner after it was tapped 1000 times. As a result, the toner discharging property and the remainder toner amount in the container were similar to the case without the tapping. The required initial torque for the rotation of the feeding member 2 is slightly higher (approximately [approx.] 8 kgf-cm), but it is not so high that the driving source is overloaded.--.

Please amend the paragraph beginning at page 49, line 8 and ending at line 18, as follows.

--As a result, the toner discharging property, and the remainder toner amount in the main body 1A of the container after the end of the discharge, were the same as with the first embodiment. The initial torque required by the rotation of the feeding member 2 when no tapping was carried out, was [approx.] approximately 2 kgf-cm, which is the same as first embodiment. The required initial torque after the 1000 tappings, was decreased from [approx.] approximately 5 kgf-cm, which is the torque without the window, to [approx.] approximately 4 kgf-cm; the initial torque when the toner is agglomerated is decreased by the window.--.

Please amend the paragraph beginning at page 49, line 27 and ending at page 50, line 9, as follows.

--As a result, the toner discharging property was better than that with the third embodiment in the stability, and the remainder toner amount in the container after the end of the discharge was equivalent to that of the third embodiment. The required initial torque without tapping was [approx.] approximately 4 kgf-cm, which is similar [similarly] to the second embodiment. The required initial torque after 1000 tappings decreased from [approx.] approximately 8 kgf-cm without the window to [approx.] approximately 6 kgf-cm.--.

Please amend the paragraph beginning at page 50, line 23 and ending at page 51, line 5, as follows.

--Referring to Figures 19 and 20, the structure for opening and closing the toner supply port 1g by the motion of the exchanging cover provided at the position, will be described. Figure 19 shows the state wherein the cover 15 is open, and Figure 20 shows the state wherein the cover 15 is closed. In these figures [Figures], the same reference numerals as in Figure 8 are assigned to the elements having the corresponding functions, and detailed descriptions thereof are omitted for simplicity.--.

Please amend the paragraph beginning at page 51, line 6 and ending at line 20, as follows.

--In Figures 19[,] and 20, designated by 19 is a toner supply container holding member having a center of rotation which is concentric with the toner receiving port 9, and the toner supply container 1 is mounted to the toner supply container holding member 19 upon the exchange operation. Designated by 20 is a guiding member provided with an engaging groove 20a which is engageable with an engaging projection 1c provided in the main body 1A, and is fixed in the main assembly 100 of the apparatus. Designated by 25 is a link for interrelating the cover 15 and the toner supply container holding member 19 at [he] the connecting portions 25a, 25b. When the cover 15 is closed, the toner supply container holding member 19 is rotated to a position shown in Figure 20 by the link 25.--.

Please amend the paragraph beginning at page 54, line 18 and ending at line 22, as follows.

--Referring to Figure 25 and Figure 26, the toner supply container part 301A, which is a main assembly of the toner supply container, will be described. Figure 25 is a perspective view of the main assembly of the container.--.

Please amend the paragraph beginning at page 56, line 26 and ending at page 57, line 4, as follows.

--The toner supply port portion is projected from the side surface 301A by 20 mm - 40 mm, and preferably [approx.] approximately 27.8 mm. The toner supply port portion 301a is cylindrical in shape, and the outer diameter of the cylindrical portion is 20 mm - 30 mm, and preferably [approx.] approximately 27.6 mm. --.

Please amend the paragraph beginning at page 57, line 5 and ending at line 23, as follows.

--As described hereinbefore, an engaging portion 301C is provided on the outside of the lower surface 301D. The engaging portion 301C is correctly positioned by a locking portion 51C (Figure 8) provided in the main assembly 100 of the apparatus when the toner supply container is mounted to the main assembly 100. The engaging portion 301C, as

described hereinbefore, is in the form of a columnar projection (dowel) projecting outwardly from the lower surface 301D. The circular column shape portion has an outer diameter 8 which is 5 mm - 12 mm, and preferably [approx.] approximately 8 mm. The positioning portion is disposed at a position 2 mm - 6 mm away from the lower surface 301D, and the engaging portion 301C (positioning portion) is disposed at a position 60 mm - 80 mm and preferably [approx.] approximately 71 mm away from the lateral end surface 301B opposite from the side of the toner supply port portion 301a in the longitudinal direction of the lower surface 301D.--.

Please amend the paragraph beginning at page 59, line 20 and ending at page 60, line 4, as follows.

--One end portion 302a of the extending portion 302C has a configuration, such as a polygonal configuration, and more particularly, a rectangular configuration, to receive the rotation force through the sealing member 303 from the main assembly 100. [Said] The one end portion of the shaft portion 302A is supported on the sealing member 303 through one end portion 302a of the extending portion 302C. The other end portion 302b of the shaft portion 302A is provided with a first bearing member 308. It is supported rotatably (upon unsealing) to the main body 301A through the first bearing member 308.--.

Please amend the paragraph beginning at page 60, line 5 and ending at line 21, as follows.

--The feeding member 302 is supported on the sealing member 303 such that the feeding blade 302B is out of contact [to] with the internal wall surface 301a1 of the toner supply port portion 301a and that internal wall surface of the toner supply port portion 301a is substantially parallel with the shaft portion 302a. By supporting the feeding member 302 in this manner, the toner can be fed substantially horizontally to the toner supply port 301g by rotation of the feeding member 302. It is possible that fine toner particles enter between the feeding blade 302B and the internal wall surface 301a1 of the toner supply port portion 301a and are fused on the internal wall surface 301a1 by strong rubbing therebetween with the result [of] that massive toner particles are produced. However, this can be avoided by supporting the feeding member 302 in that manner.--.

Please amend the paragraph beginning at page 60, line 22 and ending at line 26, as follows.

--The feeding member 2 is also preferably [manufacturing] manufactured through injection molding or the like of plastic resin material or the like, but another method and/or another material is usable. It may be made of separate members which are connected.--.

Please amend the paragraph beginning at page 60, line 27 and ending at page 61, line 4, as follows.

--Referring to Figure 27, [the] a description will be [made] provided as to a sealing member 303. In Figure 27, (A) is a front view of a sealing member, (B) is a view taken along a line A-A, (C) is a view taken along a line B-B, and (D) is a sectional front view.--.

Please amend the paragraph beginning at page 61, line 17 and ending at page 62, line 9, as follows.

--Designated by 303c is a coupling engaging portion which functions as a driving force receiving portion (driver) for receiving a driving force for rotating the feeding member 302 from the main assembly 100 of the apparatus when the toner supply container 301 is mounted to the main assembly 100. The coupling engaging portion 303c is provided with a projected portion 303c1 extended from the sealing portion 303b substantially [co-axial] coaxially with the axis of the shaft portion 302A of the feeding member 302 in the direction opposite from the main body 301A of the toner container (when the sealing member 303 is mounted to the main body 301A of the container). The coupling engaging portion 303C is provided on the curved surface of the projected portion 303c1, and is provided with [an] elongated projections (ribs) 303d (spline-like), which [functions] function as a driving force receiving portion engageable with the coupling member 304. In this embodiment, two of such spline projections 3d are provided equidistantly.--.

Please amend the paragraph beginning at page 62, line 12 and ending at line 14, as follows.

--The rib 303d is projected from the outer surface of the sealing member by 0.5 mm - 3 mm and preferably [approx.] approximately 1.8 mm.--.

Please amend the paragraph beginning at page 62, line 15 and ending at line 16, as follows.

--The outer diameter of the projected portion 303C1 is 10 mm - 14 mm and preferably [approx.] approximately 12 mm.--.

Please amend the paragraph beginning at page 62, line 17 and ending at page 63, line 4, as follows.

--The sealing member 303 includes an engaging hole 303a as a driving force transmitting portion for transmitting a driving force received from the main assembly 100 to the feeding member 302 by engagement with one end portion 302a of the feeding member 302. The engaging hole 303a is formed as an opening (hole) through the sealing portion 303b and the coupling engaging portion 303c. Here, the engaging hole 303a has a rectangular portion corresponding to the rectangular configuration of the end 302a of the shaft of the feeding member 302 projected from the powder toner supply portion 301a. It has a dimension slightly larger than that of the end 302a of the shaft, so that end 302a is loosely fitted in the engaging hole 303a.--.

Please amend the paragraph beginning at page 64, line 27 and ending at page 65, line 5, as follows.

--Designated by 303j is a locking groove for receiving a locking member 6 provided in the main assembly 100 of the apparatus. The width of the locking groove 303j is 1.5 mm - 5 mm, and preferably [approx.] approximately 3 mm. The depth of the locking groove is 0.5 mm - 5 mm, and preferably [approx.] approximately 2.5 mm.--.

Please amend the paragraph beginning at page 66, line 2 and ending at line 14, as follows.

--Similarly to Embodiment 1 and 2, the sealing member 303 has four functions. More particularly, the functions are (1) to [seals] seal the toner supply port portion 301a, (2) to receive the transmission of the rotation force from the main assembly 100 of the apparatus, (3) to transmit the rotation force to the feeding member 303 and (4) to engage with the engageable member 6 provided in the main assembly of the apparatus. Thus, the sealing member 303 transmits the driving force received from the main assembly 100 of the apparatus to the shaft portion 302A through the extending portion 302C to rotate the feeding member 302.--.

Please amend the paragraph beginning at page 66, line 15 and ending at page 67, line 4, as follows.

--[The] A description will be [made] provided as to the stirring member 305.

Referring to Figure 28, (A) is a front view of the stirring member 305, (B) is a left side view, and (C) is a right side view. As shown in Figure 28, the stirring member 305 includes a shaft portion 305a, a rigid blade portion 305b and a flexible blade portion 305c. Figure 29 is an enlarged side view of the rigid blade portion 305, and Figure 30 is an enlarged view of the flexible blade portion 305c. The shaft portion 305a is made of a relatively high rigid plastic resin material and is manufactured by injection molding. The rigid blade portion 305b is made of metal, such as stainless steel or a highly rigid material, and the flexible blade portion 305c is made of low rigidity material such as plastic resin material film or a sheet or an elastomer sheet. In this embodiment, it is of a polyester sheet.--.

Please amend the paragraph beginning at page 67, line 5 and ending at line 15, as follows.

--One end 305d of the stirring member 305 is engaged with the above-described transmitting member 306 at the bearing portion 301h of the main body of the toner supply container. The other end 305e is engaged with a stopper member (second bearing member) 310f at the second receiving portion 301b2 of the main body of the toner supply container. The shaft portion 305a in this embodiment is made of relatively high rigidity plastic resin material and is manufactured through injection molding, but may be made of another material such as metal.--.

Please amend the paragraph beginning at page 67, line 16 and ending at page 68, line 2, as follows.

--The rigid blade portion 305b is preferably integrally molded using metal or the like, another material and/or manufacturing method is usable, or it may be divided into two or more parts, which are unified by welding or bonding or the like. In this embodiment, a pressed stainless steel plate having a thickness of [approx.] approximately 0.8 mm is used. The engaging portion of the rigid blade portion 305b, which [are] is engageable with the shaft portion 305a, has a configuration conforming with the shaft portion 305a to receive the driving force from the shaft portion 305a, and it rotates with the rotational motion of the shaft portion 305a, [to] stirring the toner in the container.--.

Please amend the paragraph beginning at page 68, line 3 and ending at line 16, as follows.

--It is preferable to provide a cut-away portion 305h at one end as shown in Figure 28 since then the assembling is easy. The entire length of the rigid blade portion 305b is in the form of a substantially parallel plate relative to the tangential direction of rotation, and the downstream part of the blade portion with respect to the rotational direction is bent toward the internal wall surface of the toner supply container. The length r of the bent portion 305b1 shown in Figure 29 is [approx.] approximately 2 mm - 8 mm, and the bending angle θ is preferably [approx.] approximately 30° - 50°. Further preferably, the

length r of the bent portion 305b is [approx.] approximately 3 mm - 5 mm, and the bent angle is preferably [approx.] approximately 45°.--.

Please amend the paragraph beginning at page 68, line 17 and ending at line 27, as follows.

--In this embodiment, the length of the bent portion 305b1 is [approx.] approximately 5 mm, and the bending angle is [approx.] approximately 45°. The distance from the center of the rotation shaft to the free end of the rigid blade portion is properly determined depending on the size of the main body of the container, and it is preferably [approx.] approximately 70 - 95 % of the inner radius of the main body of the container. In this embodiment, the inner diameter of the main body of the container is [approx.] approximately 44.5 mm, and therefore, it is [approx.] approximately 39.4 mm (89 %).--.

Please amend the paragraph beginning at page 69, line 1 and ending at line 7, as follows.

--The flexible blade portion 305c is made of low rigidity material such as a plastic resin material film or a sheet or an elastomer sheet. The thickness thereof is preferably [approx.] approximately 50 μm - 500 μm and further preferably 100 μm - 300 μm . In this embodiment, the use was made [with] of a polyester sheet having a thickness of [approx.] approximately 100 microns.--.

Please amend the paragraph beginning at page 69, line 8 and ending at line 19, as follows.

--The flexible blade portion 305c is bonded such that a free end [is contacted to] contacts the internal wall surface of the main body over the entire length of the bent portion 305b1 of the rigid blade portion 305b. It rotates, scraping the toner off the internal wall surface of the container with the rigid blade portion. The length, in the radial direction, of the flexible blade portion 305c is preferably longer by [approx.] approximately 0.5 mm - 10 mm than the distance between the internal wall surface of the container and the free end of the rigid blade portion 305b since then the above-described effect can be enhanced.--.

Please amend the paragraph beginning at page 69, line 20 and ending at line 27, as follows.

--In this embodiment, it is longer by [approx.] approximately 6 mm. The bonding between the rigid blade portion 305b and the flexible blade portion 305c is made by a double coated tape 305i (DIC#8800CH) as shown in Figure 30 on the bent portion 305b of the rigid blade portion 305b. Another method using rivets or [another] another known means is usable, or the integral molding with the rigid blade portion is usable.--.

Please amend the paragraph beginning at page 70, line 1 and ending at line 21, as follows.

--As shown in Figure 31, the rigid blade portion 305b may be divided with a phase difference of 180° substantially at the central portion relative to the axis direction, so that the divided parts are staggered. The number of the division is properly determined depending on the configuration and length of the main body of the container, and it may be 3 or 4 or more. The phase of the rigid blade portion 305b may be changed over the entire length to provide a spiral-like configuration. The engaging portion between the central portion of the shaft portion and the opposite ends of the rigid blade portion 305b are preferably provided with a cut-away portion 305h as shown in the [Figure] figure since then the assembling property is improved. The length of the bent portion of the rigid blade is [approx.] approximately 3 mm to reduce the resistance of the toner and to decrease the projected area of the rigid blade portion in the rotational direction. The length and the bending angle of the bent portion is preferably [degree] 2 - 8 mm and $30 - 50^\circ$, and further preferably [approx.] approximately 3 - 5 mm and [approx.] approximately 45° .--.

Please amend the paragraph beginning at page 70, line 22 and ending at page 71, line 4, as follows.

--The rigid blade portion 305b and the flexible blade portion 305c may be crimped by means of aluminum rivets 4i. In this case, if the position of the rivet hole of the flexible blade portion 305c is deviated even slightly, waving may result, and therefore, it is preferable to provide a perforation or half cutting at a portion of the flexible blade portion

305c [contacted] contacting [to] [the] bent portion C of the rigid blade portion 305b. The bonding means may be a double coated tape or another known means.--.

Please amend the paragraph beginning at page 71, line 5 and ending at line 6, as follows.

--[The] A description will be [made] provided as to an assembling method of the toner supply container 301.--.

Please amend the paragraph beginning at page 72, line 24 and ending at page 73, line 8, as follows.

--The engaging projection 301c and the toner supply port 301g of the toner supply container 301 are preferably disposed on a line in the sliding direction of the container. By doing so, [production of] the production of a moment in either direction in Figure 32 relative to the slide direction in the toner supply container 301 can be prevented. Even if a moment in either direction is produced, the movement of the main body 301A beyond a predetermined distance can be prevented by abutment of the rib 301j as a lateral stopper portion provided in the other side surface 301B to the side wall portion 100e provided in the main assembly 100.--.

Please amend the paragraph beginning at page 73, line 18 and ending at line 24, as follows.

--The horizontal ribs 301j of the toner supply container 301 in Figure 32 are preferably provided on the top part of the toner supply container 301 to prevent [the] clogging, and in this embodiment, they are disposed at an upper portion ([upper] higher than the height center) of the toner supply container 1 with a proper clearance from the side wall portion 100e.--.

Please amend the paragraph beginning at page 73, line 25 and ending at line 27, as follows.

--[The] A description will be [made] provided as to a driving mechanism for the toner supply container 301 in this embodiment.--.

Please amend the paragraph beginning at page 76, line 13 and ending at page 77, line 15, as follows.

--[The] A description will be [made] provided as to an operation of the first coupling member 304. The movable member 513 of the coupling member is retractable in a direction A in Figure 33 because of the structure described in the foregoing. Normally, it is urging to a position shown in Figure 33 by urging means 514. When the toner supply

container 301 is mounted to the main assembly 100 of the apparatus, the sealing member 303 enters the coupling member as shown in Figure 27. If the phases of the projections 303d of the sealing member 303 and those of the drive transmitting portions 513a of the movable member 513 are matched, the gear member 512 and the movable member 513 are rotated by an unshown main assembly driving mechanism, so that the sealing member 303 is rotated through the drive transmitting portion 513a. When the phases are not matched, the movable member 513 is urged in the direction A in Figure 33 by the projection 303d of the sealing member 3. When the gear member 512 and the movable member 513 are rotated by the main assembly driver [with] in this state, the movable member 513 rotates idle until the phase matching is reached between the projection 303d of the sealing member 303 and the drive transmitting portion 513a of the movable member 513. When the phases are matched, the movable member 513 is slid by the urging means 514 to the position shown in Figure 33 where the drive transmitting portion 513a and the elongated projection 303d of the sealing member 303 are engaged to transmit the driving to the sealing member 303.--.

Please amend the paragraph beginning at page 78, line 18 and ending at page 79, line 3, as follows.

--[The] A description will be [made] provided as to an operation of the second coupling member 307. The drive transmission claw 521 of the second coupling member 307 is movable in the direction A in Figure 39 because of the structure described in the

foregoing, and is normally urged to a position shown in Figure 36 by the urging means 524. When the toner supply container 301 is mounted to the main assembly 100 of the apparatus, the transmitting member 306 enters the second coupling member 307 [. When] when the phase relation is such that transmission claw portions 307a of the transmitting member 307 are abutted to the claw portions 521a of the drive transmission claw 521.--.

Please amend the paragraph beginning at page 79, line 23 and ending at line 27, as follows.

--Thus, the transmitting member [3067] 306 receives the rotational driving force through the one way gear 527, the driving shaft 522 and the drive transmission claw 521 from the unshown main assembly driving means, so that stirring member 305 is rotated.--.

Please amend the paragraph beginning at page 80, line 1 and ending at line 2, as follows.

--[The] A description will be [made] provided as to discharging of the toner.--.

Please amend the paragraph beginning at page 80, line 13 and ending at page 81, line 12, as follows.

--The sealing member 303 is engaged with a first coupling member 304 of the main assembly of the apparatus by the coupling engaging portion (driving force receiving portion) 303C. The first coupling member 304 receives the rotation through the drive transmitting means (unshown) such as a gear or the like from the driving source (unshown) such as a motor or the like of the main assembly of the apparatus, and is transmitted to the sealing member 303 through engagement with the spline-like projections 303d. It is further transmitted to the feeding member 302 through engagement with the free end 302a of the feeding member 302 to the non-circular or square hole 303a. Similarly, the transmitting member 306 engaged with the one end 304d of the stirring member 304 is engaged with a second coupling member 307 of the main assembly of the apparatus. The second coupling member 307 of the main assembly of the apparatus receives the rotation force through the (unshown) drive transmitting means such as a gear from the driving source (unshown) such as a motor of the main assembly of the apparatus, and is transmitted to the stirring member 304 through the engagement with the engaging claw 306a. The rotational frequencies of the feeding member 302 and the stirring member 304 are [approx.] approximately 52 rotations/min [. And approx.] and approximately 10 rotations/min [. In] in this embodiment.--.

Please amend the paragraph beginning at page 81, line 21 and ending at page 82, line 5, as follows.

--The discharging experiments were carried out using the containers of the structures. The main body of the container is filled with toner, and the toner was discharged by the stirring member rotated at a speed of [approx.] approximately 10 rotations/min., and by the feeding member rotated at a speed of [approx.] approximately 52 rotations/min. The sieve (opening is 75 μ m, and made of SUS) was used to check the existence of larger particles, and it was confirmed that no large particle exists. The remainder toner amount in the container is 20 g, and therefore, the reducing effect of the toner remaining amount is also confirmed.--.

Please amend the paragraph beginning at page 82, line 17 and ending at line 25, as follows.

--For example, as shown in Figure 40, the toner feeding member may [receives] receive the driving force from the main assembly 100 of the apparatus in the toner supply port 320a or in the toner accommodating portion 301n. In this case, the sealing member 350 receives the driving force from the main assembly 100 of the apparatus by a rib 350b. The driving force is transmitted to the toner feeding member 302 by the projection 350c.--.

Please amend the paragraph beginning at page 83, line 9 and ending at line 15, as follows.

--(c) a toner feeding member (e.g. 2, 302) for feeding the toner accommodated in [said] the toner accommodating portion toward [said] the toner supply opening by rotation thereof, wherein a center of rotation of [said] the toner feeding member is in an opening region of [said] the toner supply port as seen in the longitudinal direction of [said] the toner feeding member.--.

Please amend the paragraph beginning at page 83, line 16 and ending at line 19, as follows.

--[Said] The toner supply port is projected outwardly from a lateral end surface (e.g. 1A1, 301A1) crossing with the longitudinal direction of [said] the toner accommodating portion.--.

Please amend the paragraph beginning at page 83, line 20 and ending at line 24, as follows.

--The center of rotation of [said] the toner feeding member is substantially concentric with the center of the opening region of [said] the toner supply port as seen in the longitudinal direction of [said] the toner feeding member.--.

Please amend the paragraph beginning at page 83, line 25 and ending at line 26, as follows.

--[Said] The toner supply port is substantially cylindrical having an outer diameter of 26 mm - 29 mm.--.

Please amend the paragraph beginning at page 83, line 27 and ending at 84, line 7, as follows.

--[Said] The toner feeding member has a driving force receiving portion (e.g. 2a, 302a) adjacent a toner supply port in the longitudinal direction, wherein [said] the driving force receiving portion, when [said] the toner supply container is detachably mounted to the main assembly of [said] the apparatus, receives a driving force from the main assembly of the apparatus, using [said] the toner supply port.--.

Please amend the paragraph beginning at page 84, line 8 and ending at line 13, as follows.

--[Said] The toner feeding member includes a shaft portion (e.g. 2A, 302A) and a helical feeding portion (e.g. 2B, 302B) extended along a longitudinal direction of [said] the shaft portion, and [said] the driving force receiving portion is extended from the shaft portion in its axial direction.--.

Please amend the paragraph beginning at page 84, line 14 and ending at line 15, as follows.

--[Said] The driving force receiving portion is projected outwardly from [said] the toner supply port.--.

Please amend the paragraph beginning at page 84, line 16 and ending at line 17, as follows.

--At least one full-turn of the helical portion is in [said] the toner supply port.--.

Please amend the paragraph beginning at page 84, line 18 and ending at line 20, as follows.

--A section crossing with the longitudinal direction of [said] the driving force receiving portion has a polygonal shape.--.

Please amend the paragraph beginning at page 84, line 21 and ending at page 85, line 4, as follows.

--[Said] The toner accommodating portion includes a curved portion (e.g. 301F) having a decreasing width downwardly when it is detachably mounted to the main assembly of [said] the apparatus in a cross-section in a direction crossing with the longitudinal direction, a linear portion (e.g. 301G) having a substantially constant width extended from a bottom portion of said curved portion and a substantially semicircle portion (301H)

extended from a bottom portion of [said] the linear portion, and [said] toner feeding member is disposed in [said] the linear portion and [said] the semicircle portion.--.

Please amend the paragraph beginning at page 85, line 5 and ending at line 12, as follows.

--[Said] The toner supply container supplies, into the main assembly of [said] the apparatus from [said] the toner supply port, the toner accommodated in [said] the toner accommodating portion by [said] the toner feeding member in accordance with consumption of the toner in the main assembly of [said] the apparatus, when [said] the toner supply container is detachably mounted to the main assembly of [said] the apparatus.--.



MARKED-UP VERSION OF AMENDED CLAIMS

38. (Amended) A toner supply container according to Claim 37, wherein said capping member is provided with a hole fitted by a shaft of said engaging member for sliding relative to the shaft, and when [said opening is opened to permit toner discharge therethrough,] the hole is fitted around the shaft.

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